AN ADVISORY SERVICES PANEL REPORT

Loudoun County Virginia

Urban Land Institute

Loudoun County Virginia

Land Use Recommendations for the Ashburn Subarea

October 16–21, 2005
An Advisory Services Panel Report

ULI–the Urban Land Institute
1025 Thomas Jefferson Street, N.W.
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About ULI–the Urban Land Institute

ULI–the Urban Land Institute is a nonprofit research and education organization that promotes responsible leadership in the use of land in order to enhance the total environment.

The Institute maintains a membership representing a broad spectrum of interests and sponsors a wide variety of educational programs and forums to encourage an open exchange of ideas and sharing of experience. ULI initiates research that anticipates emerging land use trends and issues and proposes creative solutions based on that research; provides advisory services; and publishes a wide variety of materials to disseminate information on land use and development.

Established in 1936, the Institute today has more than 28,000 members and associates from 80 countries, representing the entire spectrum of the land use and development disciplines. Professionals represented include developers, builders, property owners, investors, architects, public officials, planners, real estate brokers, appraisers, attorneys, engineers, financiers, academics, students, and librarians. ULI relies heavily on the experience of its members. It is through member involvement and information resources that ULI has been able to set standards of excellence in development practice. The Institute has long been recognized as one of America's most respected and widely quoted sources of objective information on urban planning, growth, and development.

This Advisory Services panel report is intended to further the objectives of the Institute and to make authoritative information generally available to those seeking knowledge in the field of urban land use.

Richard M. Rosan
President

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About ULI Advisory Services

The goal of ULI's Advisory Services Program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 400 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfields redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's Advisory Services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and screened to ensure their objectivity. ULI panel teams are interdisciplinary and typically include several developers, a landscape architect, a planner, a market analyst, a finance expert, and others with the niche expertise needed to address a given project. ULI teams provide a holistic look at development problems. Each panel is chaired by a respected ULI member with previous panel experience.

The agenda for a five-day panel assignment is intensive. It includes an in-depth briefing day composed of a tour of the site and meetings with sponsor representatives; a day of hour-long interviews of typically 50 to 75 key community representatives; and two days of formulating recommendations. Many long nights of discussion precede the panel's conclusions. On the final day on site, the panel makes an oral presentation of its findings and conclusions to the sponsor. A written report is prepared and published.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, participants in ULI's five-day panel assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academicians, representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this Advisory Services panel report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

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As the chair of the Loudoun County Board of Supervisors' Economic Development Committee, Lori Waters worked as a liaison between the Department of Economic Development and the Board of Supervisors and was quite instrumental in making the panel a reality. Special thanks go to the other members of the Board of Supervisors, including Chairman Scott York, Vice Chairman Bruce Tulloch, and Supervisor Steve Snow. The panel would also like to thank Charles Yudd of the Loudoun County Department of County Administration for providing a detailed site overview for the panelists. Other Loudoun County departments also played key roles in providing information and support for the panel, including the Office of Management and Financial Services, the Department of County Administration, the Department of Building and Development, the Department of Planning, and the Loudoun County Public Schools. The Industrial Development Authority's help and guidance are also greatly appreciated.

Finally, the panel extends its deepest thanks to the many stakeholders and community, business, and institute leaders who volunteered their time and valuable insights during the on-site interview process.

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Foreword

Home to Washington Dulles International Airport and large internationally known corporations—including America Online, Independence Air, MCI, and United Airlines—Loudoun County is one of the fastest-growing counties in the country. Its proximity to Washington, D.C.'s hot real estate and employment market has helped fuel this growth.

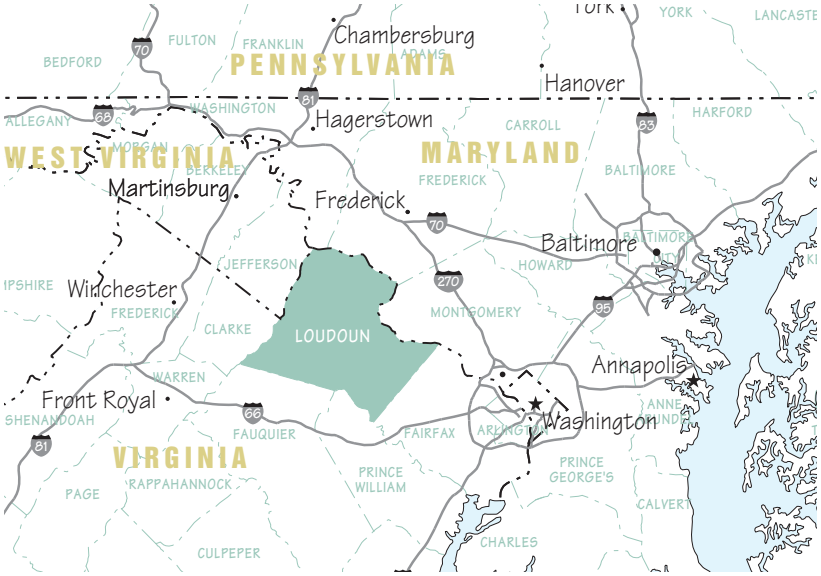
From 1999 to 2004, the Washington, D.C., metropolitan statistical area was at the top of the list of six metropolitan regions nationwide experiencing positive job growth. With 314,000 jobs added, it has over two-thirds more jobs than either Houston or New York, the next two regions on the list. As of July 2005, the unemployment rate for the Washington, D.C., metropolitan statistical area was 3.5 percent, while the national rate was 5.2 percent.

Between 1790 and 1960 the county's population remained stable—between 20,000 and 25,000 people. However, in each decade since 1960 the population has risen by at least 50 percent. Today Loudoun's population is about 250,000 people and growing.

The Study Area

With this rapid growth has come increased demand for improved transportation services, escalating land prices, and rapid suburbanization of rural land uses. In the midst of the county's ongoing debate on how to plan for and manage the effects of growth, the county purchased a 101.8-acre site for use by the public schools. This site is located along the Route 625 corridor (the corridor is aligned along Waxpool Road, which merges into Farmwell Road to the east) in the Ashburn planning subarea.

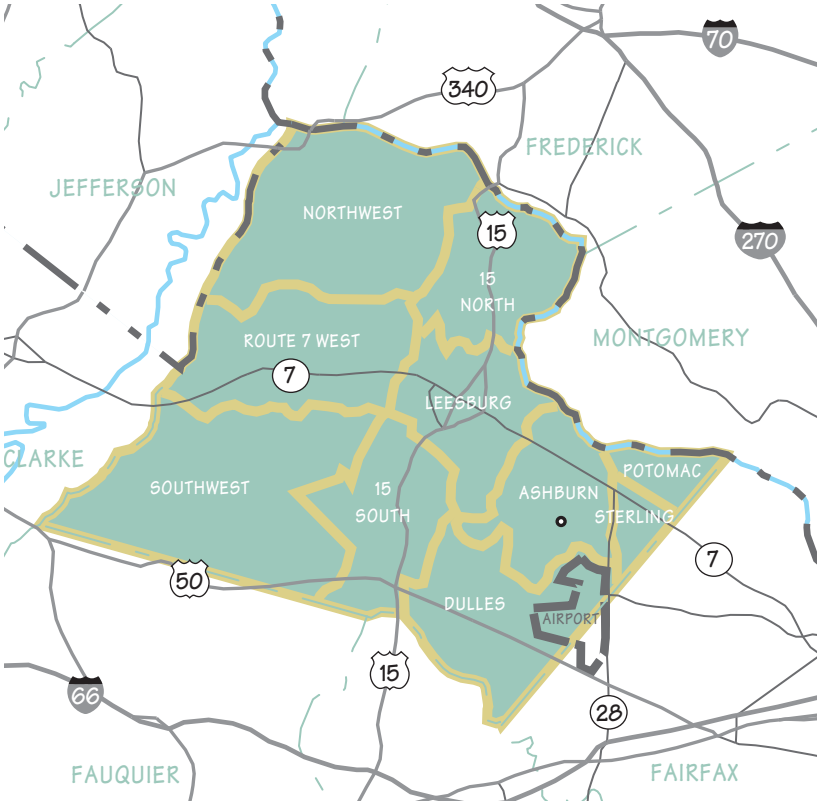
The previous owner of the site originally planned to build a private educational facility for Muslim children called the Islamic Saudi Academy. However, those plans failed to materialize and the county bought the property. Only two baseball fields on eight acres of land in the southwest corner of the project were built.



Loudoun County, Virginia, location map.

Of the ten planning subareas forming Loudoun County, Ashburn has the highest population concentration (57,599 in 2004) and is the second fastest-growing subarea. According to a study by the Loudoun County Department of Economic Development, the Route 625 corridor is zoned for flex space that mixes office and industrial uses. As the land in the corridor becomes developed, more of it is being used for offices.

The land south of the site is being used for office and industrial purposes, with MCI's corporate headquarters on its southeast border. Immediately south of the site, MIE Properties owns 77 acres on which are sited four one-story buildings totaling 216,480 square feet; MIE Properties has received the county's approval for a combined 660,680 square feet of flex industrial space in ten buildings. At present, the four existing buildings are being rented out to contractors and business service providers, including a dance stu-



Loudoun County is divided into ten planning subareas; the study area is located in the Ashburn subarea.

dio and a swimming pool where swimming lessons are taught.

At the northwestern boundary of the site is a 26-acre area being developed to provide office condominiums and retail support services. Some of the retail has already been constructed and includes a bank, a car wash, and a convenience store. At the northern boundary is another retail area with small professional office spaces. Also to the north of the site are two subdivisions, Cameron Chase and Ashburn Village. With 5,055 units (1,489 detached single-family homes, 2,424 attached single-family homes, and 1,142 multifamily homes), Ashburn Village is one of the largest of the county's planned unit developments.

The Panel's Assignment

Given the development pressures and rising land values, the county is faced with a number of options for the 101.8-acre site. The county asked the ULI Advisory Services panel to determine the best use or uses for the land and the best mechanisms for pursuing those uses. To guide that process, the county posed four options to the panel: (1) sell the land, (2) retain or exchange the land, (3) retain land for an educational use, and (4) develop the land for economic development.

Surrounding those general options are more-specific questions regarding the timing of any actions taken to sell or develop the land, the potential uses or mixes of uses on the land, the structure of deals and financing of future development, and the phasing possibilities for any future developments.

Summary of Recommendations

The panel's analysis of the county's four options form the basis of its recommendations.

Sell the Land

The panel does not recommend a sale of the land in the sense of offering the entire parcel for sale in the marketplace.

The county acquired this property at a very favorable price, and although the prospect of a sale—with an attendant large gain—is tempting, use of the parcel as recommended would better serve community interests while still realizing a profit.

The panel's study area is a vacant piece of land bordered by Farmwell Road on the north, Waxpool Road to the east and south, and Ashburn Village Road on the west.

Existing conditions surrounding the study area.

Sale of a portion of the property on an incremental basis, however, is advised.

Retain or Exchange the Land

The panel recommends that the site be retained by the county, selling off portions in accordance with a master site plan and using the balance for public needs.

A portion of the property, approximately five to 15 acres, could be used for county administrative and service needs. Currently, most of the county services are located at the county seat in Leesburg in the western side of the county, whereas most of the residents live on the east side (east of Route 15).

In addition, ten acres (including those now used for playing fields) can be retained for recreational uses and integrated with the recommended educational uses mentioned in the next paragraph. The current playing fields may be relocated, as a function of master planning the site, but such use should be included in the final site plan.

Pursue Educational Uses

The panel recommends dedicating approximately 30 to 45 acres for educational uses. The panel further suggests that these uses could include a facility dedicated to education in the sciences and technology, compatible with and supportive of the character of biotech and technology development in the county (such as the Howard Hughes Medical Institute, MCI, and AOL). In particular, a science and technology academy covering all grades from elementary through middle and high school and a limited university presence might be appropriate. This academy could establish interactive relationships with the companies located on the segment of the site reserved for economic development purposes (as discussed in the next para-

graph). Relationships between the academy and the industries on site could provide valuable research experience, apprenticeships, internships, and other opportunities for students. Opportunities exist for public/private relationships in this endeavor, and the private sector should be invited to participate at an early planning stage.

Develop for Economic Purposes

The panel recommends that approximately 45 to 60 acres be used for economic development. Such uses would include technological and biotech facilities and associated offices, with limited supporting retail. These uses should be integrated with public use facilities (such as government offices) in a coherent master site plan.

This "development" component should be marketed to the private sector pursuant to a master site plan and established development criteria. The county is advised to use a request for qualification (RFQ) process to screen potential developers and users, and then make a selection from the short list through a request for proposal (RFP). This approach will allow the private sector to bring its creative skills to bear in formulating the master site plan so as to include all suggested uses in the most suitable mix.

The county should not undertake any direct economic development because it would compete with the private sector and is not the proper role of government.

Timing

All uses on the site should be developed in response to public needs and market opportunities. Furthermore, the development should be the result of thoughtful planning, based on market research and public requirements. The county should not set artificial timing goals, either fast or slow, but should use this land asset in response to the cycle of need and opportunity.

Implementation

Within the framework of these basic guidelines, the panel recommends that the use of the land be implemented according to the following sequence:

- Determination of public needs
- Selection of a developer partner (RFQ, RFP, negotiation, and so on)
- Approval of a master site plan
- Development

This report is divided into four sections that address the economic conditions of the county, examine the market potential for the study area to make land use recommendations, envisage design opportunities for site, and discuss the tools necessary for implementing the panel's recommendations.

Economic Overview

Understanding the socioeconomic trends affecting the study area helps establish the potentials and pressures for future land uses. Research has established that Loudoun County is experiencing some of the most substantial growth of any region in the United States, and this expansion is likely to continue through future decades. Loudoun County is a significant part of the dynamic Washington, D.C., metroplex and it is increasing its role as a host to the headquarters of some of America's most prestigious high-growth companies.

As recently as 1970, Loudoun County included just 37,150 people—just 1.2 percent of the population of metropolitan Washington, D.C. As of 2005, Loudoun County has approximately 250,000 people—118,030 of whom are employed throughout the region—and represents 4.7 percent of the Washington, D.C., regional population of approximately 5.2 million people.

Significantly, Loudoun County has increased its capture of metropolitan Washington, D.C., employment growth from 1.8 percent in the 1970s and 1980s to 11.5 percent in the 1990s and 2000s. Also, Loudoun County now captures 17 to 20 percent of the Washington, D.C., region's population and housing growth. Loudoun County is projected to continue its growth as the greater Washington, D.C., area continues to evolve as one of America's most dynamic metropolitan regions.

The Washington, D.C., metropolitan area is projected to enjoy an average increase of 60,000 new jobs per year over the next decade, which will cause the population base to grow by more than 79,000 people per year. The Metropolitan Washington Council of Governments projects that Loudoun County will grow annually by 6,600 jobs and by 19,200 people in 4,700 households. By 2015, Loudoun County will include almost 380,000 people.

Conditions in Ashburn

This level of growth is projected to continue through the next decade and will have a tremendous effect on the study area and its surroundings. In 2000 the Ashburn subarea—one of ten planning subareas that make up Loudoun County, and the subarea in which the study area is located—was home to 22,581 people. By 2004, Ashburn's population had more than doubled to 57,600 people (figure 1). During that same period, the population of Leesburg (the county seat of Loudoun County) grew from 31,840 people to 44,824 while the total Loudoun County population grew from 169,599 to 229,429.

Ashburn today represents 25.1 percent of Loudoun County's population, but it is capturing 45 percent of its growth. By comparison, Leesburg represents 19.5 percent of the total Loudoun County population and is capturing only 7 percent of the annual growth. With Loudoun County projected to grow at a rate of 13,230 people per year, the population of the Ashburn subarea will likely increase by 6,000 people per year, and by 2015 approximately 200,000 people will live in Ashburn.

Population Growth in the County

Another significant socioeconomic characteristic of Loudoun County's population base is that today approximately 20.9 percent is between the ages of five and 18 years—primary and secondary school age levels (figure 2). A total of almost 52,000 schoolchildren live in Loudoun County today, and if the same growth ratios hold true, this number will increase to almost 80,000 elementary and high school students by 2015. This projected growth has tremendous implications for school planning through the next decade, because as many as 2,800 new students per year will be introduced into the Loudoun County school system. At the opposite end of the spectrum, only 12.1 percent of the Loudoun County population is over 55

As of 2005, Loudoun County has approximately 250,000 people, representing 4.7 percent of the Washington, D.C., regional population; however, the county captures between 17 and 20 percent of the region's population and housing growth.

LOUDOUN COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT

Figure 1
Population by Loudoun County Subarea

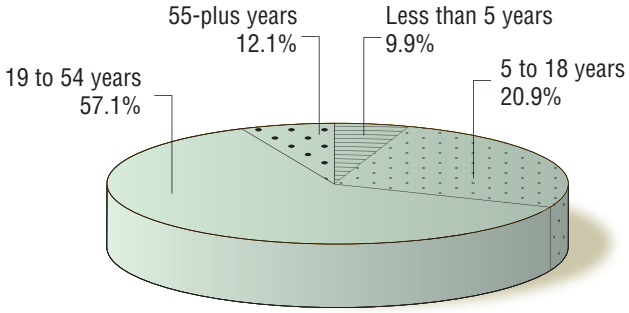
Subarea	Population 2000	Population 2004	Share of 2004 Population	Percentage Change 2000–2004
Ashburn	22,581	57,599	25.1%	155.1%
Dulles	7,795	17,923	7.8%	129.9%
Leesburg	31,840	44,824	19.5%	40.8%
Northwest	6,499	7,742	3.4%	19.1%
Potomac	39,115	42,387	18.5%	8.4%
Route 15 North	2,506	3,024	1.3%	20.7%
Route 15 South	2,403	2,680	1.2%	11.5%
Route 7 West	12,354	16,642	7.3%	34.7%
Southwest	6,056	6,721	2.9%	11.0%
Sterling	27,450	29,887	13.0%	8.9%

Source: U.S. Census Bureau; Loudoun County Department of Economic Development; Loudoun County Fiscal Impact Committee.

years of age, compared with the national average of 22.3 percent. Facilities for seniors will not command nearly the same level of attention as elementary, middle, and high schools.

Today Loudoun County has 42 elementary schools, 12 middle and intermediate schools, eight high schools, and the Monroe Technical Center. Given the current relationship of population to school ratios (which is likely to stay near its current level), Loudoun County needs to anticipate the construction of 22 elementary schools, six middle schools, and four high schools over the next decade. With the Ashburn subarea capturing 45 percent of population growth, many of those new schools will need to be located there along with other amenities for children, such as parks, playgrounds, and playing fields.

Figure 2
Age of Loudoun County Residents, 2004



Source: U.S. Census Bureau; Loudoun County Department of Economic Development; Woodes & Poole Economics, Inc.

Commercial Development Trends in Loudoun County

Loudoun County experienced success in attracting business developers during the economic expansion of the 1990s. As a result, the county was transformed from a bedroom community to an employment center. The county's inventory of office and industrial space includes 24.9 million square feet and has 10.8 percent of Northern Virginia's square footage (figure 3).

LOUDOUN COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT

Home to Washington Dulles International Airport and large, internationally known corporations—including America Online, Independence Air, MCI, and United Airlines—Loudoun County is one of the fastest-growing counties in the nation.

Figure 3
Northern Virginia Rentable Commercial Space Inventory, 2003

Jurisdiction	Rentable Building Area (Square Feet) Office	Flex	Industrial	Total	Percent of Region	Number of Buildings
Alexandria City	17,634,642	1,076,186	4,782,411	23,493,239	10.2%	630
Arlington County	33,366,091	193,734	1,575,834	35,135,659	15.3%	306
Fairfax County*	94,425,080	15,703,605	21,278,546	131,407,231	57.2%	2,017
Fauquier County	163,691	171,670	260,748	596,106	0.3%	11
Loudoun County	10,161,188	7,321,522	7,437,939	24,920,649	10.8%	563
Prince William County*	3,102,576	3,060,164	7,973,619	14,136,359	6.2%	391
Total	**158,853,268**	**27,526,881**	**43,309,097**	**229,689,243**	**100.0%**	**3,918**
Distribution	69.1%	12.0%	18.9%	100.0%		
Number of buildings	2,367	546	1,005	3,918		

* Includes independent cities.

Source: CoStar Realty Information Inc., compiled by Loudoun County Department of Economic Development.

Figure 4
Loudoun County Nonresidential Building Permit Trends, 1994–2004

Year	Square Feet Permitted Office	Industrial	Retail	Other*	Total
1994	–	67,166	161,429	459,978	688,573
1995	201,790	131,034	425,850	172,025	930,699
1996	355,684	262,625	533,283	695,943	1,847,535
1997	468,391	777,366	121,278	841,337	2,208,372
1998	1,843,364	913,249	1,158,478	1,098,211	5,013,302
1999	1,708,919	1,217,589	532,130	1,882,646	5,341,284
2000	2,034,389	3,207,333	879,981	1,877,463	7,999,166
2001	843,831	1,361,026	461,018	1,809,405	4,475,280
2002	156,392	415,072	529,918	800,216	1,901,598
2003	413,835	468,860	731,472	1,600,998	3,215,165
2004	231,920	1,287,078	799,673	1,529,523	3,848,194
Total	**8,258,515**	**10,108,398**	**6,334,510**	**12,767,745**	**37,469,168**
Distribution	22.0%	27.0%	16.9%	34.1%	100.0%

* Includes schools, hospitals, churches, airport support facilities, hotels, self-storage, and the like.

Source: Loudoun County Department of Building and Development, compiled by Loudoun County Department of Economic Development.

Figure 5
Loudoun County Nonresidential Building Permit Trends by Planning Subarea, 2004

Subarea	Total Square Footage					Distribution
	Office	Industrial	Retail	Other*	Total	
Ashburn	138,192	705,039	273,656	1,035,205	2,152,092	55.9%
Dulles	0	201,117	394,003	60,745	655,865	17.0%
Leesburg	13,064	7,000	10,881	17,982	48,927	1.3%
Northwest	0	0	0	1,968	1,968	0.1%
Potomac	28,086	0	0	149,824	177,910	4.6%
Route 15 North	0	0	0	0	0	0.0%
Route 15 South	0	0	0	3,088	3,088	0.1%
Route 7 West	0	0	13,250	24,628	37,878	1.0%
Southwest	0	0	0	0	0	0.0%
Sterling	52,578	373,922	107,883	236,083	770,466	20.0%
Total	**231,920**	**1,287,078**	**799,673**	**1,529,523**	**3,848,194**	**100.0%**
Distribution	6.0%	33.4%	20.8%	39.8%	100.0%	

* Includes schools, hospitals, churches, airport support facilities, hotels, self-storage, and the like.

Source: Loudoun County Department of Building and Development, compiled by Loudoun County Department of Economic Development.

The majority of Loudoun's office and industrial land is located in the eastern portion of Loudoun County along six distinct corridors: Route 7, Route 28, Route 625 (near the location of the site), Route 606, the Dulles Greenway/Route 267, and Route 50.

Those corridors include a total of almost 13,000 acres zoned for office and industrial uses, of which 32 percent has already been developed. Analysis of the developed sites reveals a trend toward underdevelopment, with only 14 percent coverage—well below the maximum of 40 percent allowed by the county zoning ordinance. If this trend of underdevelopment continues, only 87 million square feet will be built instead of the 137.0 million square feet allowed.

A substantial amount of vacant usable land, approximately 3,000 acres, is available within the next three years, which is the time frame that will likely meet the next business growth cycle. However, only 500 of those acres are subdivided with infrastructure and being offered for sale to businesses and developers. The balance of the land is available for sale in large tracts and build-to-suit or lease options.

Loudoun County added 18.4 million square feet of office and industrial space, averaging 1.5 million square feet per year during the 11-year expansion period between 1994 and 2004. Additionally, retail sectors added 6.3 million square feet during that period (figure 4).

The area surrounding the study area demonstrates characteristics of much of the inventory of commercial space that exists in Loudoun County. Today the Ashburn submarket has 22.5 million square feet of commercial space that represents 39.3 percent of Loudoun County's total supply of commercial space. The commercial land permitted for development in 2004 in the Ashburn submarket was 2.2 million square feet, which represents almost 56 percent of the total development permitted in the county (figure 5).

With Loudoun County projected to grow by an annual average of 6,600 jobs per year over the next decade, after normalization of vacancies a demand will likely be generated for the absorption of 700,000 to 750,000 square feet of office space annually and 1.0 million to 1.4 million square feet of industrial space annually, including approximately 700,000 square feet of flex space.

Loudoun County Government Administration Facilities

Loudoun County general government facilities currently include almost 620,000 square feet and house 2,200 employees. The county leases 27 percent of the total and owns 451,745 square feet. With the growth of 130,000 people expected over the next decade, Loudoun County will need to add approximately 265,000 square feet of administrative facilities. It may be desirable to locate some of the service-oriented functions in a more convenient location in the Ashburn subarea where more than 50 percent of the county's commercial construction and 45 percent of its residential development occurs.

Economic trends indicate continued growth with continued population and job increases, which translates into an increase in needs for services and schools. Although a significant projected demand exists for economic uses, enough land and space are currently available to satisfy that demand. A portion of the study area should be set aside to address the projected needs for services and education. Land on the site will still be available for economic growth as well, and these uses can be combined with innovative applications.

Market Potential

In light of the substantial growth in the county that is expected over the next ten years, the panel encourages the county to take a long-term approach and a broader view of the opportunities the site provides. The panel has divided the site into four land uses that it believes are appropriate given the current and projected land use trends: government services; educational uses; recreational needs; and technology, biotech, and flex uses (figure 6).

Government Services

As the county continues to grow, more need will arise for government services, especially in the population-heavy eastern side of the county and in Ashburn. The study area can provide land for the county (administration, social services, and even storage). This use presents the county the opportunity of moving out of leased space and into county-owned space.

As mentioned previously, the county currently owns 620,000 square feet of space, and the need for space is projected to grow to 875,000 square feet over the next five to ten years. Considering this projected need, the panel recommends a portion of the site be used for 200,000 to 250,000 square feet of county-owned and operated space in the form of two- to four-story buildings.

Educational Uses

The county has a unique opportunity to use the site for a specialized public school. The panel envisions creating a math, science, and technology academy for grades one through 12 and providing options for continuing education. Taking advantage of the heavy concentration of biotech and high-technology industries in the area, the academy could integrate the educational process with businesses and industries located both on and off site. The academy, working with the county and with local private sector businesses, could create an environment of synergistic interactions that would be beneficial to all parties involved.

The panel prefers the use of the words "academy" and "campus" to describe the proposed educational facility because such terms help define the school as a "destination"—a place where creative minds can gather from all areas of the county. The panel further envisions that graduates from the academy would be highly qualified technicians with the skills needed to work at the local biotech and high-technology businesses. However, their educational experiences would also prepare the graduates to continue at prestigious colleges and universities, majoring in science and engineering fields. The panel recommends that 400,000 to 450,000 square feet be dedicated to the academy and that the academy be housed in one-, two-, and possibly three-story buildings.

The site's location near many major population and employment centers can further help solidify the concept of the academy as a destination. The

Figure 6
Market Potential Recommendations Summary

Use	Size/Requirements (Square Feet)	Building Height (Stories)
Government services	200,000–250,000	2–4
Educational uses	400,000–450,000	1–3
Tech/biotech/flex space	600,000–700,000	2–8

alternative is to use the land for traditional educational purposes. Embracing the latter alternative, the panel believes, would be a missed opportunity for both the county and the school district. The panel believes that a tremendous opportunity exists here for creating an innovative, unique education experience involving the interaction of business, industry, and education.

Recreational Needs

Although eight acres of the site have already been dedicated to playing fields, the panel notes that only a small portion of that land is being used. The panel recommends a modest increase of two acres, bringing the total amount of land available for ballparks to ten acres.

Technology, Biotech, and Flex Uses

The panel recommends a broad range of commercial and industrial uses for the site. Those uses include, but are not limited to, companies that specialize in technology and biotech industries, small consultancies, business incubation facilities, start-up companies, and corporate headquarters. In addition, such uses will require ancillary service retail and restaurants to support both workers on site and those from nearby companies. As mentioned earlier, annual need for 1.3 million square feet of commercial area is projected in the Ashburn submarket. The site's share of this demand could take the form of 600,000 to 700,000 square feet in buildings ranging in height from two to eight stories. And depending on the degree to which the county embraces vertical construction, the possibility exists of providing up to 1 million square feet of commercial space.

Parking

The panel's recommendations are based on the assumption that surface-level parking will be used. However, the panel encourages the county and real estate development community to evaluate the merits of underground or structured parking. Creative opportunities exist for other parking scenarios, but exploration of those opportunities will depend on the desire to use the site in the most-efficient ways possible.

Planning and Design

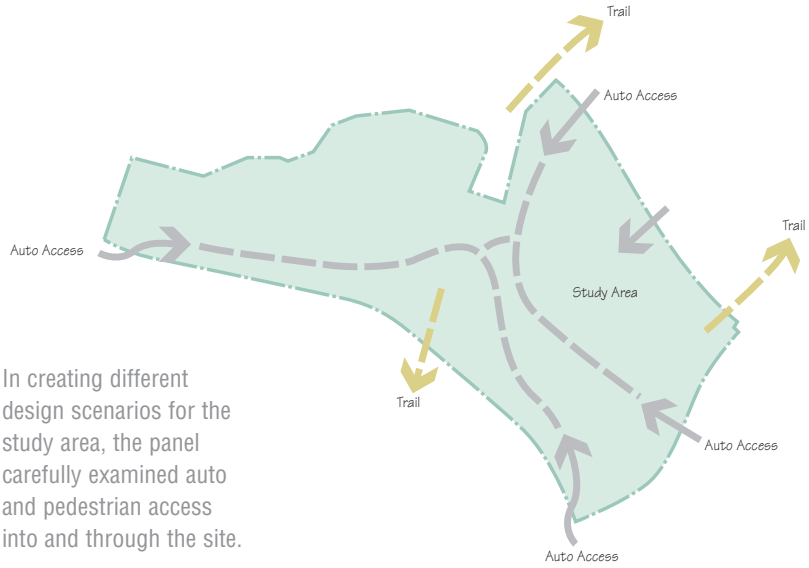
In considering the possible arrangement and placement of buildings on the subject site, the panel examined how access into and out of the site can be handled. The panel then looked at the topography and stormwater runoff patterns and how they will need to be addressed. Finally, the panel studied the potential ways in which the recommended land uses can interact on the site given the amount of land allocated to each use.

Access

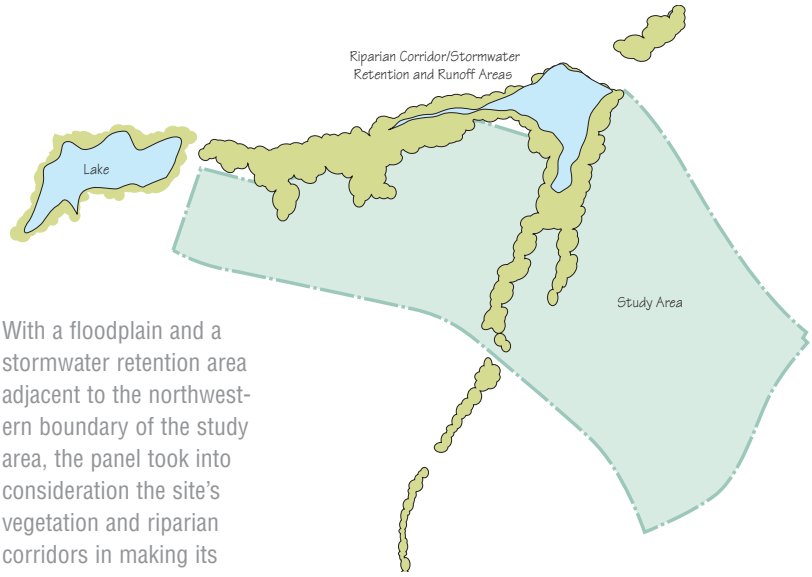
At present the site has only three curb cuts that lead into the property and no roads through it. Just below the project's southern border are a pair of curb cuts, one at the west end (along Ashburn Village Boulevard) and the other at the east end (along Waxpool Road). The panel recommends sharing those cuts with the adjoining properties and using them as the entry and exit points for an east-west road through the site. Moreover, an existing curb cut on Farmwell Road at the northern end of the property could form another road through the property that would link up with another existing curb cut on Waxpool Road.

In addition to facilitating the circulation of cars into and through the project, the panel believes that making the site appealing to pedestrians and foot traffic is important. The existing topography and riparian corridors that run through the middle of the site and define the site's northwestern boundary present an opportunity for creating a trail system through the subject site that would then connect it to the adjacent properties—as well as the Washington and Old Dominion Trail, Howard Hughes Medical Institute's Janelia Farm Research Campus, and other industries and busi-

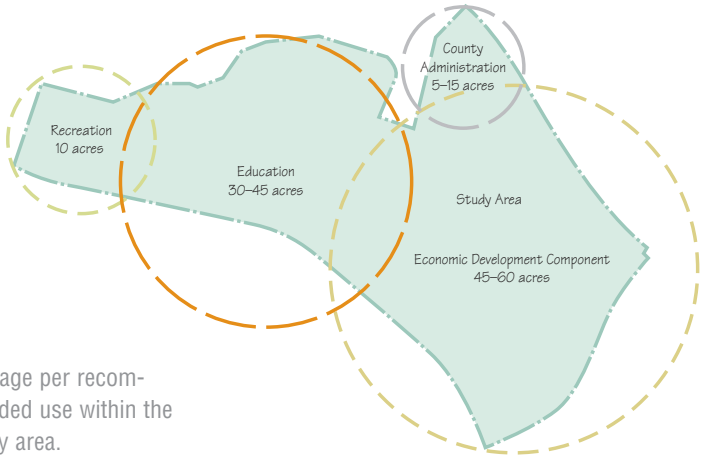
Existing floodplains and riparian corridors on and adjacent to the site could become part of a trail system or a major landscaping feature for the project.



In creating different design scenarios for the study area, the panel carefully examined auto and pedestrian access into and through the site.



With a floodplain and a stormwater retention area adjacent to the northwestern boundary of the study area, the panel took into consideration the site's vegetation and riparian corridors in making its recommendations.



Acreage per recommended use within the study area.

nesses in the county—and even to the Potomac River.

Floodplains, Stormwater Retention, and Riparian Corridors

Although the floodplains and existing riparian corridors on and adjacent to the site could become part of a trail system, the panel also sees potential for those areas to become a major landscaping feature for the project. The illustration at center left shows where these riparian areas are located on the site. Immediately west of the site on the other side of Ashburn Village Road is a substantial lake that serves as part of a stormwater management system for the Farmwell Hunt subdivision. Similarly, a lake or water feature in the stormwater retention area north of the site along Farmwell Road could easily be installed and could act as a centerpiece for the entire project.

Placement of Land Uses

The illustration at lower left presents a visual summary of the acreage distributions recommended in the market potential section of this report. The circles in the diagram overlap to show that the uses can be mixed, and the panel hopes that the uses will be mixed to the maximum extent possible.

Although the final configuration and arrangement of land uses and buildings on the site will be determined through an RFQ/RFP process, the panel suggests that the county buildings be located at the northern end, close to two of the existing curb cuts. This location will provide a convenient access point off Farmwell Road for people to come and go to the buildings for various county services. The largest and most visible element of the project will be the economic development component, and therefore the panel has located it at the intersection of Farmwell and Waxpool roads for maximum visibility and accessibility.

With building height limits of 100 feet and depending on whether structured parking or surface parking is used, the possible floor/area ratio ranges from 0.4 to 0.6, or possibly as high as 0.7. Depending on what types of buildings are chosen and how parking is incorporated into the site, the ex-

isting zoning allows for a lot of space to be built on the study area.

Design

A few themes and "big ideas" guided the panel's creative process for visualizing the site's design. The panel took inspiration for the site from Rafael Viñoly's plans for the Howard Hughes Medical Institute's Janelia Farm Research Campus just a few miles away. Although the construction costs needed to achieve Viñoly's vision make the creation of something comparable on site unfeasible, the panel believes that endless possibilities exist for architects and designers to work with Janelia Farm's themes, aesthetics, and ideas on the subject site.

One of the main themes for Janelia Farm is that its buildings reflect a strong sense of creativity and innovation. Likewise, the concept of innovation should be a major design theme for the study area, and the built environment should seek to enhance the creative and innovative potential of its tenants. One important means of doing so is to make sure that the project's architecture encourages interaction among people on the site as well as fostering interaction between the site and the rest of the world.

Another important theme for both Viñoly and the panel is the integration of the natural world and the built environment. The stormwater retention areas and riparian corridors should be integrated into the overall site design and planning of buildings on the subject site. Options such as nature trails, careful landscaping, and building orientation must be considered.

Crucial to the success of any development on the site is that it become a focal point for Loudoun County. The site needs to be a destination and a crossroads for ideas. The means to convey this idea is through architecture.

Bringing in a star architect—a "starchitect"—or a well-known architecture firm to design a portion of the site can be a profound means of communicating to the world that this destination is important. A similar strategy was used at Innovation Park in neighboring Prince William County with the Center for Innovative Technology designed by Arquitectonica. Any such architectural project on the site must also create linkages with the adjacent properties.

Finally, Joel Kotkin, author of *The City: A Global History*, identifies three key ingredients of successful cities: they must be safe, be busy, and have sacred spaces. Kotkin defines sacred spaces as symbolic, public, and communal places that inspire a sense of reverence. Plazas, parks, monuments, and graveyards are examples of such sacred spaces. As Loudoun County continues to grow, the panel believes it will become very important that developers include an element of sacredness in the site design and architectural plans for the study area.

Design Scenarios

Considering the various attributes, constraints, and topographic features as well the panel's land use recommendations of mixing education facilities, county services, and high-technology/biotech firms on the study area, the panel envisioned three possible design scenarios. The scenarios are not recommended land plans. Rather, they are meant to inspire and provide examples of what is possible. Each of these design themes carries with it the of goal creating something that is special for the county and that can further elevate the county's reputation as a leader and center for technology and science.

Scenario 1: A Signature Campus of International Significance

Many great college campuses are built in a quadrangle formation, and quads act as focal points in this scenario for the study area. In this scenario, the three uses of the site (education, county administration, and private business) are mixed together in a college setting. Serving as the gateway or "face" of the project, one large building with two wings faces Farmwell Road. Cars enter the site from this busy street, and their first views of the site are of this building and the "outdoor room" formed by its wings.

The college campus design theme provides a metaphor for creation and innovation, yet the quads framed by the buildings also serve as additional playing fields. The presence of an actual school on

Scenario 1: A signature campus of international significance.

Scenario 2: A farmers market.

the site adds an air of authenticity to this arrangement, so that education, industry, and recreation are brought together to create synergistic effects for all parties.

In this arrangement, the panel envisions underground parking or structured parking and iconic buildings with a maximum of five floors. Although variables such as building height and the economics of parking must be investigated under such a scenario, future developers should keep in mind that less surface space devoted to parking frees up more space that can be devoted to people and buildings.

Scenario 2: A Farmers Market

The director of Janelia Farm uses a farm metaphor to describe the development. Janelia Farm is meant to provide fertile ground for the minds that come to work there. While Janelia Farm provides space for scientists conducting basic research, the land devoted to economic development in the study area would be devoted to finding and selling applications derived from that basic research. In this scenario the panel imagines the site as a farmers market.

This design scenario takes its inspiration from Granville Island in Vancouver, British Columbia, a former warehouse district that was transformed into an arts and shopping regional attraction. The architecture on the island is composed of industrial elements—galvanized metal, concrete, old warehouses, and a range of inexpensive building materials arranged in a pedestrian-friendly manner. A graphic arts school located in the midst of this setting immerses its students in a dynamic and highly creative environment.

Like Granville Island, the farmers market design scenario would be an exciting, interactive, and entertaining environment for tenants, students, and visitors alike. Careful integration of ancillary uses such as restaurants, dry cleaners, and other employee support services into this pedestrian-friendly space would add to the vibrancy of the "farmers market" while freeing up time that workers would otherwise spend in their cars driving to errands or lunch.

One of the ways in which this scenario seeks to reflect and encourage innovation is through the creation of buildings for each of the "ten faces of innovation"—the subject matter of a recently published book of the same name. Written by Tom Kelley, the general manager of IDEO, a major design firm, the book describes ten personas or roles that people can adopt to enhance creativity within the workplace. The educational component in the farmers market is arranged so that students can be taught in ways that are suited to their personas and learn how to relate to others with different personas. The academy would consist of ten separate buildings, each devoted to a persona. Those buildings would then be arranged around three common buildings where the students can come together. The common buildings would symbolize Kelley's three stages of innovation—learning, organizing, and building—and could potentially be mixed-use spaces shared by some of the private companies on site.

Scenario 3: The Natural Capital Campus

This design scenario takes as its predominant theme a respect for life and the natural world. The curved buildings on the site are meant to be reminiscent of sliced DNA strands. Each of the recommended land uses is mixed together in this scenario. The riparian and floodplain corridors through the site are enhanced and rehabilitated to a more natural state. The buildings are connected to each other through a series of trails that are designed to remind the walker of a refreshing nature hike. The natural world is expressed on the site through the experience of walking through the site.

Although sustainable building practices should be considered for this site under any scenario, those practices are highlighted and emphasized in this third design scenario. The natural elements on the site, such as landscaping, softscaping, and low levels of impermeable surfaces, will help limit stormwater and act as a natural filtration system.

Scenario 3: The natural capital campus.

Implementation

To ensure successful implementation of the master plan for the study area, the panel recommends a focus on three fundamental components: the identification of needs by public stakeholders, the creation of an integrated master plan, and the selection of a master developer.

Identification of Needs by Public Stakeholders

In order to ensure that the selection of the master developer and resulting master plan adequately account for the needs of the school board; the county; and the Department of Parks, Recreation, and Community Services, each public stakeholder, through its own processes and procedures, must be fully prepared to express its particular needs.

The School Board

The panel acknowledges the needs set forth by the school board in its October 14, 2005, letter to ULI. That letter asked the panel to consider setting aside 25 acres for a career and technical center, another 20 acres for an elementary school, and between ten and 20 acres for athletic fields.

However, in order to distinguish this site from other school sites and to take advantage of the interactive resources this particular site has the potential to offer, the panel has proposed the previously discussed math, science, and technology academy. The architecture, curriculum, and programs available at this academy should focus on challenging those already excelling in science and technology while also nurturing those students whose aptitude in science and technology is still developing.

Key employers in the area, local universities, and foundations within Loudoun County have expressed an interest in the advantages and opportunities such a program would have for their firms and the county. Indeed, those partners (coming from both the private and public sectors) should be invited to collaborate with the school board in developing the format and goals of the academy.

For the academy to become reality, however, leadership and commitment from the school board are required. The panel recommends that an amendment regarding the academy be added to the school board's six-year capital improvements plan (CIP) and that funds be added to the CIP budget to plan for the academy.

The panel recognizes how well the CIP funds have been managed and how this success has affected the county's bond ratings. To a large extent this success is the result of respecting the six-year cycles specified in the CIP. The panel further recognizes that the insertion of a project into the plan without respect to the six-year cycle can disrupt the budgeted flow of funds, thereby jeopardizing the county's high bond ratings. For this reason, the panel believes that money has to be inserted into the plan as quickly as possible so that minimal disruption affects that already existing financing process. So that planning for the site can proceed in an orderly fashion and build off the momentum of the panel process, the panel recommends that the school board complete its evaluation of its needs and commitment to the academy within one year.

The Department of Parks, Recreation, and Community Services

The panel acknowledges the extraordinary need for ballfields and recreational areas within the vicinity of this site. As mentioned earlier, the panel has recommended increasing the area dedicated to this use to ten acres. Currently eight acres have been set aside; however, despite the high level of demand for more recreational spaces, only about three of those acres appear to be actually used for fields. The remaining land either is undeveloped or is used for parking and support for those fields. The opportunity to share parking with adjacent users and to incorporate the ball-

fields into the recreational needs of the proposed academy can result in an increase in the number of ballfields for the public and additional space for the academy. Furthermore, through the sharing of facilities and careful site design, the recreational facilities can add to the level of economic vitality on site—attracting people and providing opportunities for them to spend money.

Therefore, the panel believes that the location of the ballfields should be determined during the development of the master plan and that the Department of Parks, Recreation, and Community Services should determine the number and type of recreational fields it would propose within a ten-acre area. In order that the planning for the site can continue, the panel recommends that the Department of Parks, Recreation, and Community Services complete its plans for the number and type of fields desired on ten acres and include the costs for such recreational uses within its budget to the county board of supervisors within one year.

The County Government

The panel has also acknowledged the opportunity presented by this site to accommodate the extension, relocation, or both of all or a part of the county administrative services. The panel further acknowledges that many county-owned buildings are operating at capacity and that the county spends in excess of $4 million a year on leased space. The site, the panel believes, presents the county with an opportunity to reexamine its needs for space. Located within a planned growth corridor for the county, the study area can accommodate the need for expanded municipal services.

Moving county services would not be a small undertaking and would entail many wide-ranging implications and ramifications for the entire Loudoun community. Therefore the panel recommends that the board of supervisors appoint a task force to consider this proposal and study all of the options and opportunities carefully. If all or a portion of the county's administrative services are relocated to this site, the panel would recommend that the board add this project to its six-year CIP budget so that the project proceeds in an orderly fashion. So that the planning for this site can proceed, the panel suggests that the board complete its analysis of this opportunity within a one-year time frame.

Creation of and Commitment to an Integrated Plan

The project's success relies on creating an integrated master plan for the entire site as expeditiously as possible. The master plan should account for both the public component (school board, county, and parks) and the private component.

A high potential exists for self-sustaining and economically viable business and technological uses on the site. The land values attributed to the property, the lack of development constraints, and the high demand for land by growing companies eager to enter or expand their presence in Loudoun County make this site a valuable economic opportunity for the county. The panel believes, however, that this economic development opportunity can be enhanced and distinguished if integrated into a coordinated plan with focused educational and governmental services. The synergy of uses will be essential in making the project a distinctive destination and resource for the county.

In order to achieve this enhanced opportunity, the public and private uses should be integrated by the use of distinctive, high-quality complementary architecture, pedestrian connectivity throughout the site and with adjacent properties, coordinated landscaping and entryways, and shared parking and amenities. The panel recommends that a mas-

Given the rapidly growing population of children under the age of 18 in the Ashburn subarea, the panel recommends that 400,000 to 450,000 square feet (about nine to ten acres) of the study area be devoted to educational uses.

Ten Principles for Successful Public/Private Partnerships

1. Prepare properly for public/private partnerships
2. Create a shared vision
3. Understand your partners and key players
4. Be clear on the risks and rewards for all parties
5. Establish a clear and rational decision-making process
6. Make sure all parties do their homework
7. Secure consistent and coordinated leadership
8. Communicate early and often
9. Negotiate a fair deal structure
10. Build trust as a core value

ter plan be developed consistent with those objectives and that public and private users of this site commit to a fully integrated plan.

Selection of a Master Developer

The panel strongly recommends that the public stakeholders harness the experience and expertise of a qualified, private sector master developer selected through an RFQ/RFP process to create a master plan that accounts for the integration of public and private uses envisioned for the site. A master developer must be a firm with the expertise to work with a variety of stakeholders to create a common vision for a mixed-use site; oversee the master planning of the site, including any rezoning, entitlements, and establishment of a governing framework (design guidelines, covenants, and the like); manage the horizontal development (infrastructure) process; and serve as the landowner's agent to negotiate deals with developers and end users.

Several compelling reasons exist for the panel's recommendation of the use of a master developer from the private sector. First, a qualified private sector master developer will have the requisite experience and expertise in planning and implementing mixed-use real estate projects on sites such as the study area. Second, a master developer will be able to anticipate the needs of the private sector and market the private component of the project to the types of users that can fulfill the vision for the site. Finally, the involvement of a master developer will lend credibility to the project with consultants and lenders.

In selecting a master developer to create the master plan for the site, the county board of supervisors should proceed in the following fashion:

1. The board of supervisors should develop a request for qualifications to solicit interest from the most qualified and most experienced mixed-use developers. The developer must have prior experience in public/private partnerships and possess sufficient financial depth and bonding ability to prepare, develop, and implement the master plan.

2. The county should then solicit a request for proposals that is based on the determination of needs by the major stakeholders (the school board; the board of supervisors; and the Department of Parks, Recreation, and Community Services) as well the input of several highly qualified master developers.

3. The RFP should outline sufficient incentives and assurances to the master developer to encourage the best responses to the RFP.

4. Following selection of the best proposal, the county should negotiate final terms and necessary arrangements with the master developer, grant the necessary entitlements to the master developer consistent with the winning proposal, and then convey the private portion of the site to the master developer.

Finally, the panel recommends that interested parties keep in mind the ten principles for successful public/private partnerships established by the Urban Land Institute.

Conclusion

The panel was asked by the Loudoun County Department of Economic Development to help determine what the county should do with a centrally located 100-acre site the board of supervisors purchased in 2004. The panel notes that purchasing this site was a shrewd business decision and that the land appears to have doubled, if not tripled, in value. Selling the land is, of course, an option; however, the panel does not believe that option is advisable. After examining growth patterns and economic and population projections, the panel is of the clear view that Loudoun will need much more land for future public uses.

In addition to public uses, an ongoing need exists in the county to stimulate economic development opportunities. It is the panel's opinion that those needs can be met together with a level of control and influence that is usually not available to most public entities. Usually, governments must make real estate development decisions in a reactive mode, responding to the needs of developers who are willing to make deals and contributions to the community. However, in this case, Loudoun County owns the land and can direct what goes on the land and specify the preferred uses. Therefore the county is in a unique position, but this position does not mean that the county should go into the real estate development business. Instead, the panel recommends the creation of a public/private partnership with a master developer. A master developer will be able to add private sector creativity, innovation, and energy; yet, in a public/private partnership, the county maintains a high degree of influence and control over the process. In this situation the county is not reacting to a developer's plan; rather, the county is a partner and is helping to shape the final outcome.

The crucial first step in this process is for the county to identify its expected public use needs (administration, education, recreation). The panel process can create a great deal of momentum that the county can build on. The panel believes that a focused, thoughtful effort can help people reach answers on questions of public use needs, determine whether the academy idea makes any sense, evaluate what the county service needs are for eastern Loudoun, and decide how to integrate limited recreational uses—all within a year.

With the educational component, in particular, the panel strongly recommends looking at something truly different that builds upon the technological and science community that currently exists in the area. The school board should seriously examine this idea and further assess its feasibility.

The county government needs to assess whether services can be relocated from their present locations to the subject site or satellite facilities created to accommodate the growth in eastern Loudoun County. The need for recreational facilities also needs a much closer examination. The Department of Parks, Recreation, and Community Services must determine how best to meet the growing countywide need for recreational services.

Although the panel believes the assessment of needs should take place within the course of a year, the panel strongly cautions against setting arbitrary timelines and goals. Everything should be done in response to needs and opportunities. When the assessment of needs is complete, the county can approach the development community to solicit proposals, land plans, and financial ideas for meeting those needs in a public/private partnership. Working in conjunction with a master developer, the subject site can be developed on a time frame that is responsive to the needs of the public's side of the partnership as well as the opportunities that will arise on the private sector's side of the partnership.

About the Panel

James M. DeFrancia

Panel Chair
Aspen, Colorado

DeFrancia is a principal of Lowe Enterprises Community Development, Inc., a national real estate development company engaged in commercial, industrial, and residential development, and president of its community development division. He has been involved in real estate development for more than 25 years; prior to that, he served as an officer in the U.S. Navy.

DeFrancia is a trustee of the Urban Land Institute, a member of the Northern Virginia Building Industries Association, a former Virginia representative to the Southern Growth Policies Boards, and a former member of the board of the Metropolitan Washington Airports Authority. He has been a guest lecturer or panelist for the Bank Lending Institute; the Lincoln Institute of Land Policy; the Graduate School of Design, Harvard University; George Mason University; and George Washington University.

DeFrancia is a 1963 graduate of the U.S. Naval Academy, with postgraduate studies in business and finance at the University of Michigan.

Morey Bean

Colorado Springs, Colorado

Founding partner of the Colorado Springs–based Colorado Architecture Partnership, Bean is an architect and planner with experience ranging from the design and execution of innovative university research parks to new urbanist community design. Colorado's Architect of the Year for 1999, Bean serves on the Colorado Growth Task Force of the American Institute of Architects (AIA), and is an adviser to the mayor of Colorado Springs and city of Colorado Springs on design matters. He is also the lead architect in the Innovation Center for the University of Colorado, Colorado Springs, in cooperation with the Pike's Peak Community Foundation.

Bean is a member of the AIA and Urban Design committee chair of the Colorado South Chapter of the AIA.

Daniel M. Conway

Aurora, Colorado

Conway is a real estate marketing and research authority specializing in commercial/industrial and residential developments. Conway has more than 30 years experience as an urban land economist. For the last 20 years as president and director of economics and market research for THK Associates, he has conducted numerous commercial, industrial, and residential economic feasibility and market studies, as well as socioeconomic impact assessment and financial planning studies.

Projects of particular interest include an international market center and industrial market analysis for the Dove Valley Business Air Park in Arapahoe County and a residential and related uses market analysis for several major developments in Douglas County, including the 1,342-acre Parker City site, both in Colorado. Specific communities where Conway has completed a wide range of research and analysis include Las Vegas and Reno, Nevada; Oxnard, Palm Springs, and Carmel, California; Kansas City, Missouri; Oklahoma City and Tulsa, Oklahoma; Austin, Texas; Albuquerque and Santa Fe, New Mexico; Seattle, Washington; and Phoenix and Tucson, Arizona.

Conway has served on several ULI advisory services panels, including panels for Florida State University Research Park and Kennedy Space Center Research Park.

Steven R. Jenkins

Dallas, Texas

Jenkins is a partner with Haynes and Boone, LLP, a Dallas-based law firm ranked among the top 100 law firms in the country and among the leading technology-oriented law firms in the world. Jenkins' experience includes more than 30 years representing large, sophisticated clients in complex real estate transactional matters and managing major client relationships. Prior to joining Haynes and Boone in 1995, Jenkins was for many years the managing partner of another large, Dallas-based law firm. His expertise includes all aspects of real estate development, including acquisitions and sales, municipal and land use regulatory matters, leases, partnerships, joint ventures, financing, REITs, construction, and property management.

In the land use planning area, Jenkins has been actively involved for many years in a number of the most significant private and public land use planning initiatives in the Dallas, Texas, area. He has represented private and public companies in land use planning initiatives for many of the most significant real estate developments in Dallas, including regional malls, major office developments, hotels, corporate headquarters facilities, and research facilities. Jenkins has also been actively involved in a leadership role in many citywide and areawide public land use planning initiatives, including a complex planning process involving the entire city of Dallas. In addition to actively practicing law, Jenkins has served as chairman of the Joint Committee on City Planning, director of the Greater Dallas Planning Council, and director of the Real Estate Council.

R.J. Nutter

Virginia Beach, Virginia

Nutter is a partner in the law firm of Troutman Sanders, LLP, and his principal office is in Virginia Beach, Virginia. Nutter is the chairman of the firm's Zoning and Land Use Practice group, which is composed of more than 20 attorneys in six of the firm's seven U.S. offices. In that capacity, he is responsible for developing and implementing land use issues and goals to guide the firm's clients and the members of the practice group.

Nutter received his undergraduate and J.D. degrees from the University of Richmond. His primary experience has been in representing both local governments and private developers in matters dealing with land use, real estate, municipal corporations, annexation, and environmental law. Nutter was named as one of Virginia's Legal Elite by *Virginia Business* magazine in 2004.

Some of his most recent significant land use engagements have been the necessary approvals and zoning amendments to accommodate a 2 million-square-foot urban town center; a 2,000-acre planned resort community on Virginia's eastern shore; a $1 billion marine terminal, the largest private terminal in the United States; and a $200 million planned medical campus.

Nutter has served on various land use committees for various localities throughout southeast Virginia that were responsible for drafting new state legislation and local ordinances for resort revitalization and oceanfront renewal, drafting new commercial guidelines for development, and establishing criteria for telecommunications facilities. He is a frequent speaker on land use, annexation, and real estate law for the American Planning Association, Virginia Municipal Legal, National Business Institute, and the Virginia Association of Zoning officials, and various other private organizations.

Lyneir Richardson

Chicago, Illinois

As vice president of urban land development, Richardson heads the initiative of General Growth Properties to undertake retail and mixed-used development projects in cities across the country. The Urban Land Development Group targets opportunities that have a retail component of at least 100,000 square feet and are located in densely populated cities, gentrifying communities, and downtown redevelopment districts.

Prior to joining General Growth Properties, Richardson held positions as president of LakeShore Development Co., vice president of Thrush Construction Co., and attorney at the First National Bank of Chicago.

Richardson is a graduate of Bradley University and the University of Chicago Law School. He is

a member of the International Council of Shopping Centers and the Urban Land Institute. He also serves as vice chairman, Illinois Housing Development Authority Trust Fund Board, and is a member of the board of directors of the Boys and Girls Club of West Cook County.

Virginia Scott

Washington, D.C.

Scott is a managing director in Jones Lang LaSalle's Public Institutions practice in the Washington, D.C., corporate office. She is a leading contributor to the firm's government specialty, providing strategy, financing, and negotiating services to public sector clients. She is currently working with the U.S. Air Force to develop a programmatic strategy for enhancing the value of their underused real estate assets across the United States.

Scott has worked for Jones Lang LaSalle in a variety of capacities over the past ten years, including the underwriting of various investment opportunities, assisting in managing investment portfolios, and in the marketing and disposition of assets for key public and private sector clients.

Scott provided local market and land use redevelopment advice to a confidential client on plans to redevelop a 44-acre site along Washington, D.C.'s Anacostia River, preparing redevelopment alternative schemes aimed at creating a vibrant and economically attractive market-stable environment that addressed the District's redevelopment goals. Her responsibilities included land valuation analysis, economic impact studies, zoning and legislative analysis, phasing planning, and preliminary marketing and stakeholder strategies. She also developed presentation material and a term sheet for meetings with the mayor's office and other District planning officials.

Additionally, Scott has acted as a key member of Jones Lang LaSalle's team to plan and develop Cantera, a 650-acre mixed-use development project near Chicago, Illinois. Her responsibilities included performing financial analysis, developing project pro formas for specific development sites, assessing tax increment financing impacts, and coordinating the annual budgeting process for the project team and client. Scott also researched area zoning authorities and related fees to assist in negotiating with the local municipality.

Mark Viets

Westwood, Kansas

Viets received his bachelor of science and master of architecture degrees with final honors from Washington University in St. Louis. He is a principal of Peckham, Guyton, Albers & Viets Architects and Planners. PGAV is a 100-person firm with offices in Kansas City, Kansas, and St. Louis, Missouri. The firm has a special interest in large-scale office and institutional development worldwide. Many of these projects include waterfront planning and design in such places as Kansas City, St. Louis, New Orleans, Chicago, and Barcelona, Spain. Clients include Stowers Medical Institute, Irvine Industrial Estates, Universal Studios as well as 44 colleges and universities.

Viets currently serves on the Kansas State Building Advisory Commission, as appointed by the governor, and he is a director of the U.S. Bank corporation. He has served as chairman on several planning commissions, boards of zoning appeals, and boards of structural appeals, as well as serving as airport commissioner and city council member.

Within the ULI organization, Viets has served on numerous advisory panels and has been a trustee, chairman of the Publication Committee, and chairman of the Kansas City District Council. He is currently a ULI Foundation governor and an honorary member.